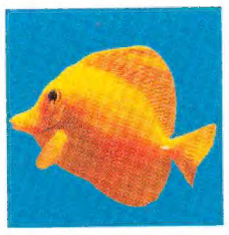
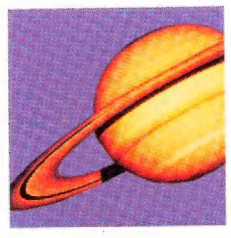



California Academy of Sciences

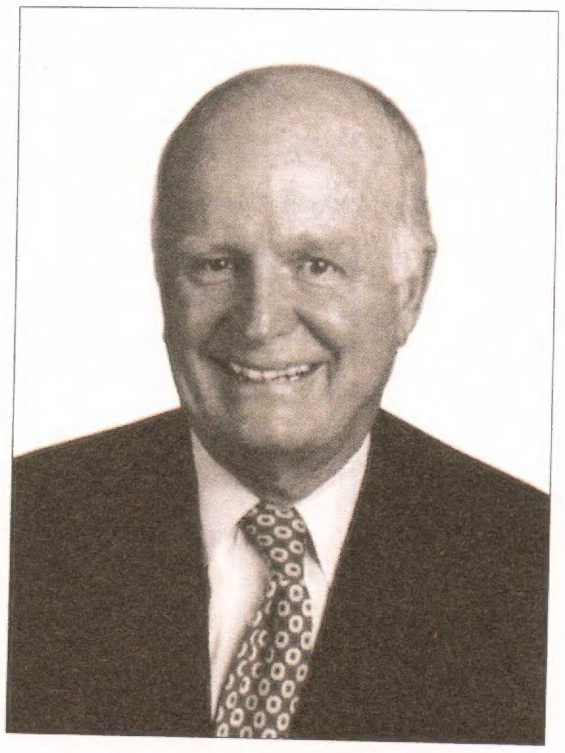
1998-1999 Annual Report

Letter from the Chairman of the Board

Under the leadership of Dr. Patrick Kociolek, the education and exhibit programs of the Academy have been fortified, the associations with the Bay Area's educational establishments enhanced and cemented, and the regional and international research objectives put firmly in place. Now, for our further goals to be realized, we must focus our attention on the physical structure. Our buildings, which were built with private funds, are owned by the City and County of San Francisco. Unfortunately, the City has not been properly maintaining the buildings in recent years and they are in need of substantial expenditures to cover serious seismic deficiencies, leaking roofs, inadequate fire detection, mechanical, and electrical systems, as well as improving access for the handicapped.

In 1906 the Academy's home on Market Street was destroyed in the fires that followed the earthquake. In 1910 the San Francisco voters approved the relocation of the Academy to Golden Gate Park. As the century draws to a close, we are preparing to embark on a second full-scale rebuilding program. The Loma Prieta earthquake forced the closure of one building and exposed many of the remaining buildings to seismic safety issues. Over 1,000 children pass through the Academy each day, 365 days a year. We must make the capital expenditures necessary to retrofit these buildings. The cost to bring the physical plant up to code and to ensure the safety of our visitors and employees will be substantial. We will ask the voters in San Francisco to help with a Bond on the Ballot in March of 2000. The Board of Trustees has committed to raising additional funds so that the majority of funds required for the buildings and the exhibits will be paid from sources other than the proceeds from the Bond.

This last year, the Board of Trustees has invested considerable time listening to the Academy's primary stakeholders and constituencies—visitors, neighbors, Academy Fellows, members, donors, volunteers, teachers, and children. Next year we will be taking your ideas to architects and planners who will work to make these City buildings safe, and to incorporate cost-efficient and innovative design ideas. We are looking to choose an architectural firm and exhibit planner from among the best in the world. We are committed to creating an exciting, stimulating, and interactive exhibition space and to fully supporting our education and research programs, with state-of-the-art classrooms and premier facilities for the research scientists. We are also planning to interface the exhibits and public program areas with our research projects so our scientific work behind the scenes and our exhibits and public programs become more integrated. Our mission will be more comprehensively articulated to all our students, educators, and San Franciscans at large. We will enhance our role as a source of information and guidance locally, as well as regionally and nationally.



We will have a museum that will be easily accessible, both physically and philosophically, and welcoming of everyone, especially all San Franciscans. We also expect to recreate a museum whose structure and content will enhance its existing significant international reputation, presenting new exhibits and new education and research facilities designed for a new century.

Our visitors, children and adults alike, will experience ever-changing programs about the wonders of the natural world. It will be an exciting place to visit and to learn.

W. Richard Bingham
Chairman, Board of Trustees

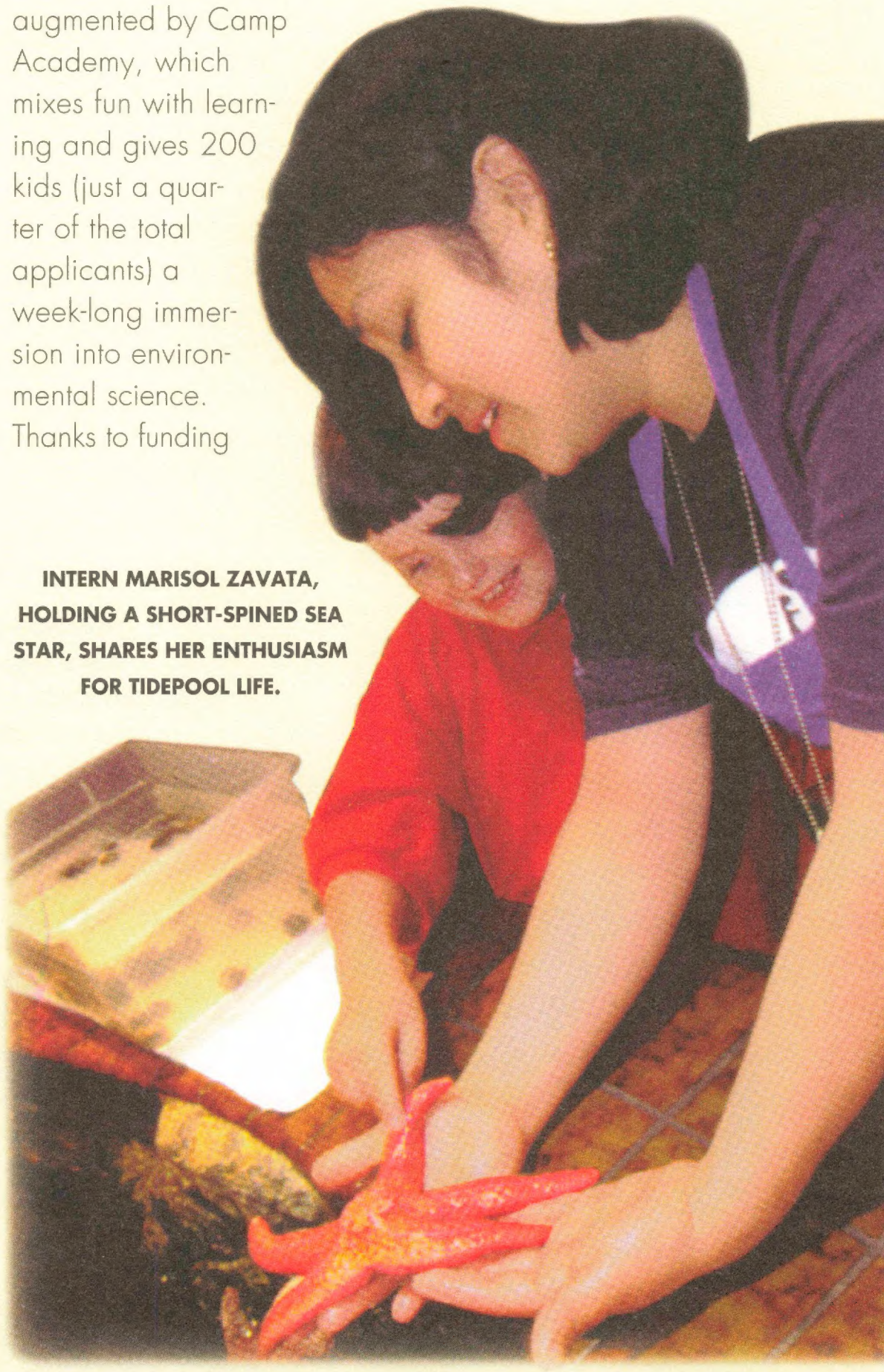
. . . Real Education about Real Science

"The direction in which education starts a man will determine his future life." Plato wrote that 2,400 years ago, but it is a truth independent of time. And it has become a philosophy central to the mission of the California Academy of Sciences. Our goal is to create an excitement for the natural world in children and adults of all ages, and to use our myriad resources, nurtured over nearly 150 years, to offer lifelong support.

Through its scientific expertise, the Academy is ideally positioned to offer, in the words of Chair of Education Sam Taylor, "Real education about real science." A perfect example is a newly-initiated study of Mountain Lake, the only remaining natural lake in San Francisco. Located on the southern edge of the Presidio, Mountain Lake has been ignored for decades and degraded by human impact. The Academy has partnered with the Golden Gate National Parks Association, The Presidio Trust, World Wildlife Fund, and San Francisco City College to provide middle and high school students and local groups of concerned neighbors the opportunity to engage in field research while helping restore the lake.

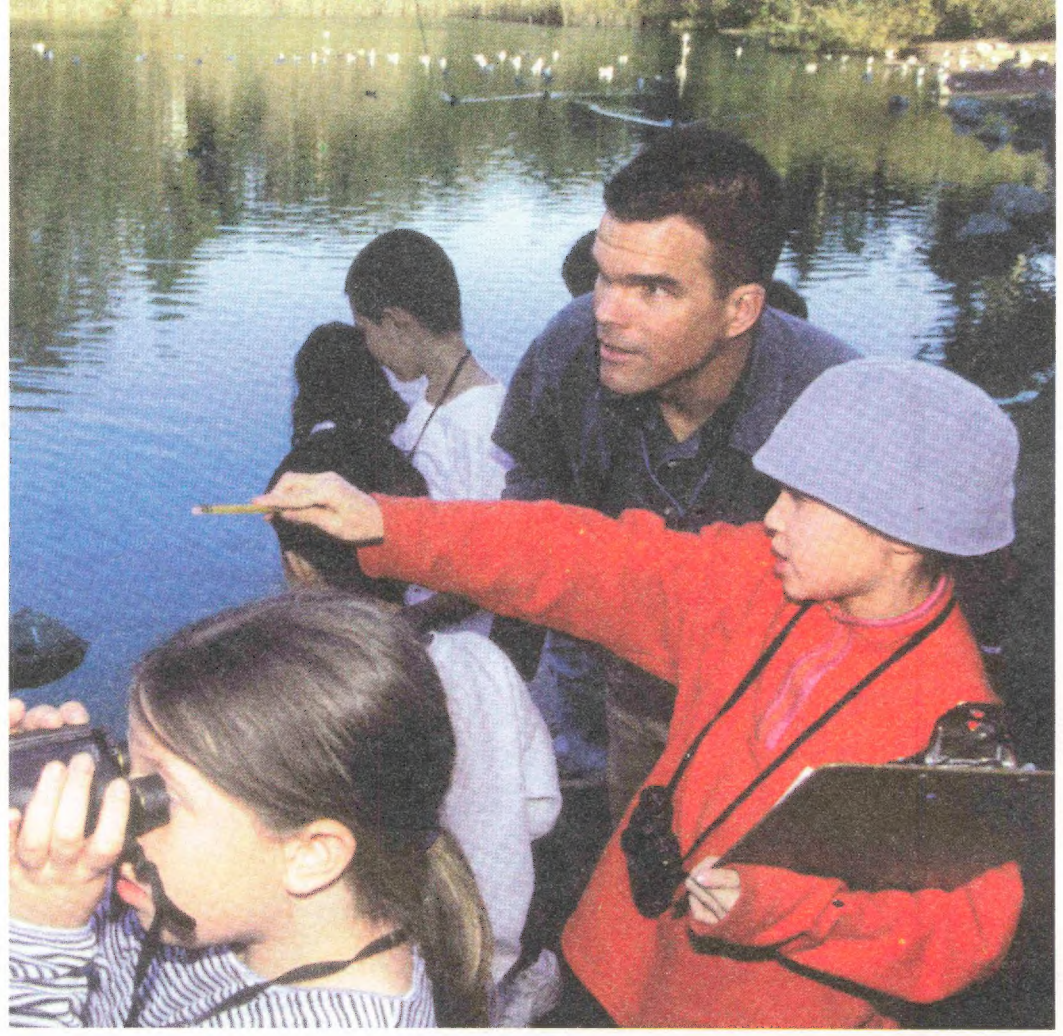
The initial species inventory and water-quality monitoring are already underway with active participation by many Academy scientists. Most of the long-term monitoring will be done by schoolchildren under the guidance of Project Manager Jack Laws. The students will be taught to use Global Information Systems (GIS) technology to ascertain the location of species and the water quality at specific points within the area. Each class follows a specific protocol while studying a particular group of organisms. In the near future, to halt further deterioration and improve the habitat for native species, the lake will be dredged to its historical depth. By then, thanks largely to the baseline studies by the children and volunteers, we expect to have the necessary data to monitor the impact and effectiveness of the restoration efforts.

Junior Members have been welcomed to the Academy family since 1929, and for many children their introduction to the Academy is through the Junior Academy. This year the Junior Academy has placed more emphasis on field-based activities: seventy percent of the 121 courses we offer include getting outdoors to explore Golden Gate Park and study its fauna and flora. The program is directed toward children between the ages of six and fourteen. Through our partnership with the Department of Parks and Recreation LatchKey Program many of the children are recruited from playground communities around the city. Where possible, the classes have a practical component: the youngsters help with restoration projects and assist the gardeners in the Park's greenhouses. In Summer, the classes are augmented by Camp Academy, which mixes fun with learning and gives 200 kids (just a quarter of the total applicants) a week-long immersion into environmental science. Thanks to funding



INTERN MARISOL ZAVATA, HOLDING A SHORT-SPINED SEA STAR, SHARES HER ENTHUSIASM FOR TIDEPOOL LIFE.

Science Education



UNDER THE GUIDANCE OF FIELD STUDIES MANAGER JACK LAWS, LOCAL SCHOOLCHILDREN DISCOVER URBAN WILDLIFE AROUND MOUNTAIN LAKE IN THE SAN FRANCISCO PRESIDIO.

from Bank of America, two-thirds of the places go to kids from community-based organizations—playground and latchkey programs—around the city.

Our programs connect with the kids when they're in school as well as on weekends and during vacations. "Wild City!" is a hands-on environmental science program for San Francisco's 4th through 6th graders. It brings to life the state's science framework curriculum, transforming classrooms into laboratories for literal, down-to-earth investigations. This dynamic, field- and classroom-based educational series was refocused this year on biodiversity and conservation. It includes the basics of biodiversity—what it is, its benefits to humanity, and what is being done to protect it by the Academy and by the general public.

We also strive to reach all the local schoolchildren, encouraging them to visit the Museum and Planetarium. This year some 400,000 children visited the museum and 49,000 came to the special shows at the Planetarium designed for school groups. Particularly gratifying are the Planetarium figures that show an increase over the previous year despite an overall decrease in class size, which means that we are reaching out to more schools and more teachers.

Most children are naturally curious about the world around them, but as they enter middle school they become particularly vulnerable to losing that curiosity and sense of wonder. The Academy makes a special effort to encourage the natural aptitude and enthusiasm of young teenagers and keep them interested and involved with science. At age 15 they are eligible for the Intern Program where, after training, they are able to help the Museum in teaching science, doing science, and providing administrative support. They act as "exhibit explainers," take part in the outreach programs, and assist in the research departments. The intern program follows our general policy of encouraging recruitment of girls and minorities and offering students a support network

THE ACADEMY HAS A LONG EDUCATIONAL TRADITION. BOTANY CLASS IN THE MARKET STREET ACADEMY OF SCIENCES, CIRCA 1890.

that includes advisors, mentors, and financial assistance. We not only teach science, but also work skills, and even life skills. Our goal is to build long-term relationships, keeping students associated with the Academy right through high school and to create a career ladder that will lead them on to college degrees and careers in teaching and the sciences. Every one of the interns that graduated from high school last year went on to college, many to study the sciences.

The seeds that were sown when the Education Department was incorporated into the Research Division four years ago came to full flower this year. The Academy now plays a more involved role in the continuing support of students, both in the United States and overseas, as they prepare for careers in science.

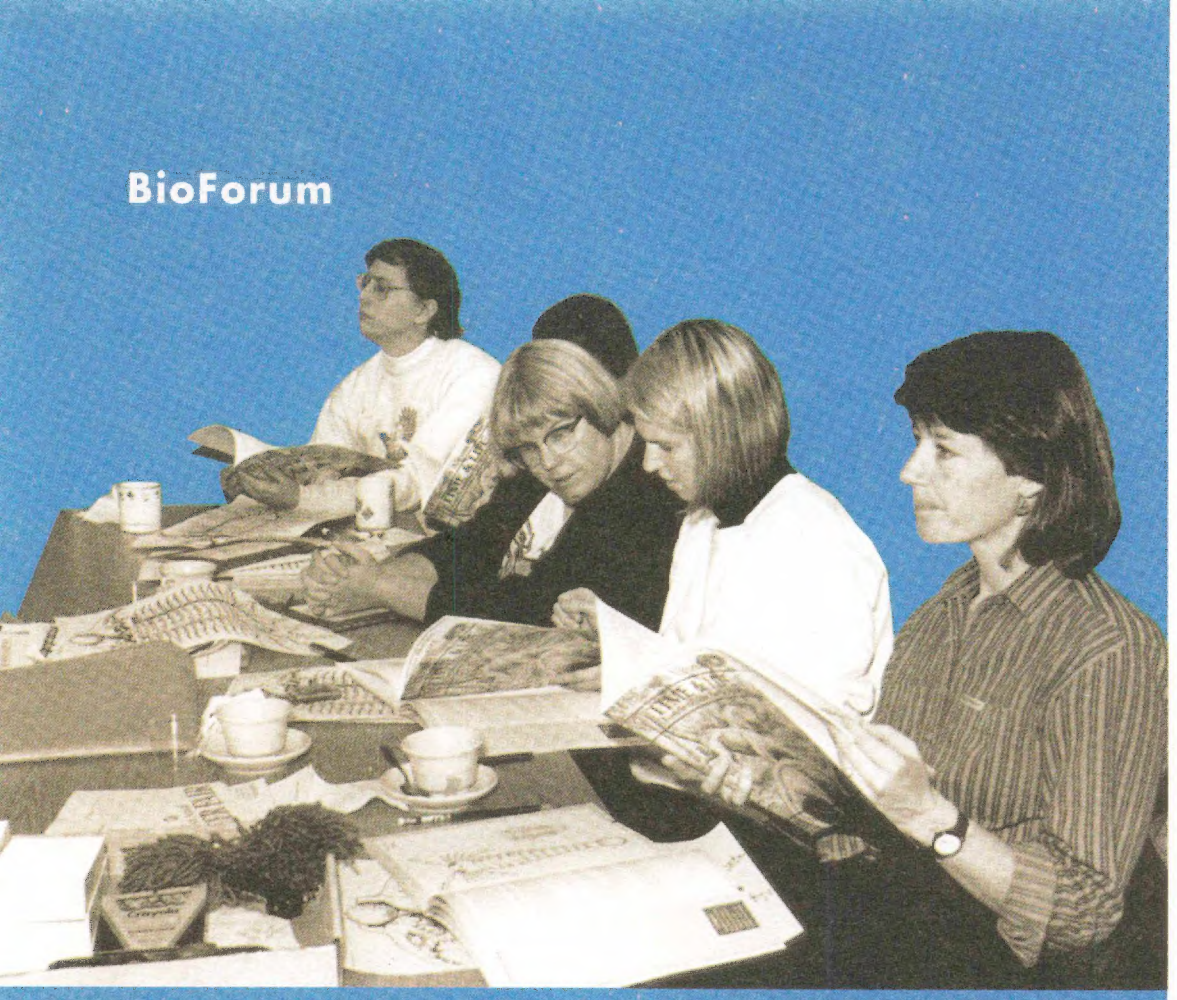
The National Science Foundation renewed its grant for the Academy's Summer Systematics Institute, which attracts undergraduates from all over the country to work with our scientists during the summer. We are particularly committed to increasing diversity among systematists; 70 percent of these students were women and ten percent were minorities. They are expected to participate in a research project and will become co-authors of scientific papers, presenting their results at national and international scientific meetings. As in previous years, a high percentage of these students are moving on to graduate studies in science, a career path that many have chosen because of their experiences here at the Academy.

In May the Academy held a joint symposium with Stanford University on "Museums, Universities, and Biodiversity in the 21st Century." It underscored the continuing necessity for collection-based systematic research as practiced in museums and the need for its reintegration with conservation biology research, based on genetic and ecology studies, which are the strengths of the universities. According to Research Director Dr. Terrence Gosliner, the conference "was a real call-to-action for creative ways to strengthen collaboration and build new partnerships."

The Academy has already responded to the call. Many of the Research Departments' accomplishments include a strong educational component. They are devising joint research and teaching programs for students from Stanford, the University of California at Santa Cruz, and San Francisco State University. We continue to strengthen the relationship with San

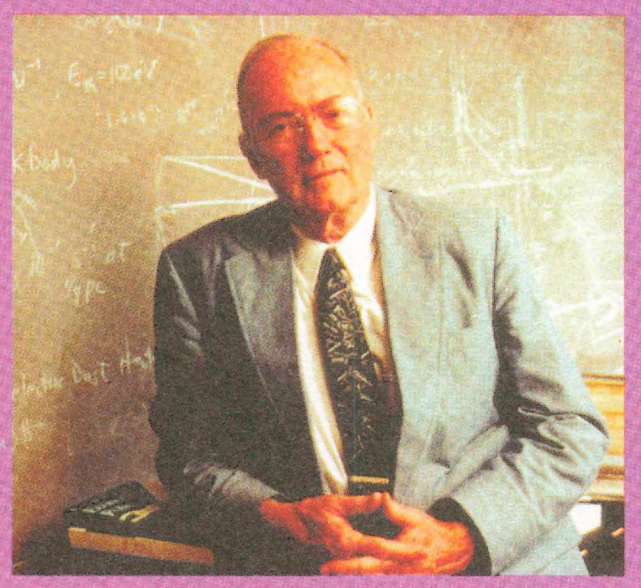
RIGHT: ACADEMY DIRECTOR R.C. MILLER LEADS AN EXCURSION TO MOSS BEACH IN 1948. BELOW: BOTANY CURATOR ALICE EASTWOOD TAKES THE ALPINE CLUB TO THE SIERRA NEVADA AFTER A WILDFIRE, 1925.

STUDENT SECTION (THE PRECURSOR TO JUNIOR ACADEMY) MEMBERS IN THEIR CLUBROOM, 1948.



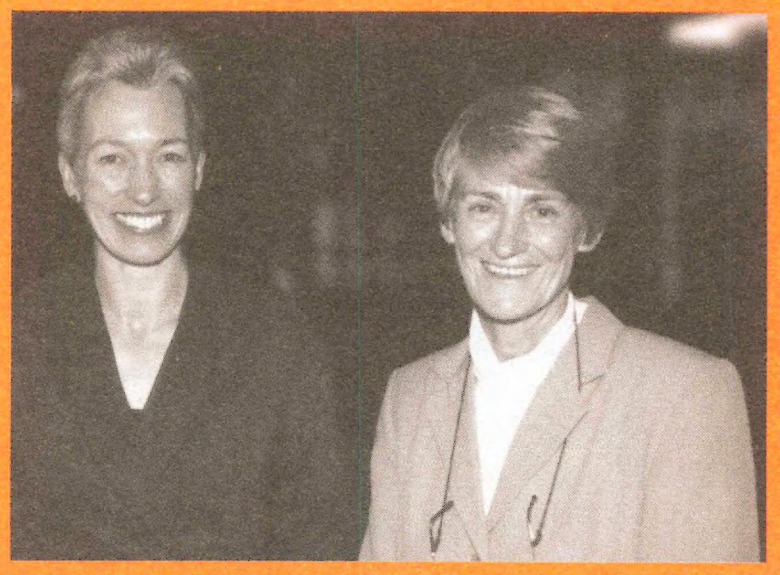
BIOFORUM PROVIDES AN OPPORTUNITY FOR HIGH SCHOOL TEACHERS TO INTERACT WITH SCIENTISTS AND LEARN ABOUT CURRENT RESEARCH.

Benjamin Dean Lecture Series



AMONG THE LECTURERS IN THIS YEAR'S SERIES WAS NOBEL LAUREATE DR. CHARLES TOWNES WHO INVENTED THE MASER, PRECURSOR TO THE LASER.

Missing Links Alive!



CURATOR OF ANTHROPOLOGY NINA JABLONSKI (LEFT) WITH PALEOANTHROPOLOGIST MEAVE LEAKEY WHO WAS THE GUEST LECTURER AT THE OPENING OF THE MISSING LINKS ALIVE! EXHIBIT.

Francisco State University. Twelve Academy curators now hold research faculty positions, and masters students from that university are working with curators on systematic research. Five masters students were awarded Academy-funded, graduate assistantships and work with an Academy advisor. These students are integrated into the working of the institution, cooperating in the development of exhibit content, assisting behind the scenes at the Aquarium and helping organize the Academy's Downtown Lecture Series. A newly-signed Memorandum of Understanding with the University of California at Santa Cruz has also led to internships and graduate assistantships in systematics and editorial assistance with *California Wild*, the Academy's quarterly science publication.

A critical component of our education program is the BioForum series for high school and community college biology teachers. The three well attended sessions this year included one on Microbes—which coincided with an exhibit—and two subjects close to the Academy's heart: Conservation Biology and Modern Systematics. "BioForum is a special time for me to learn, to hear from scientists about the research they are doing now," remarked one local high school biology teacher after the session.

The Academy played host to a parade of distinguished scientist-writers who spoke at the Herbst Memorial Theater in San Francisco's Civic Center. Among them were Laurie

GROWTH AND USE OF COLLECTIONS IN RESEARCH DEPARTMENTS IN 1998-99

DEPARTMENT	SPECIMENS ACCESSIONED	SPECIMENS LOANED	VISITORS
Anthropology	126	1,079	12
Aquatic Biology	n/a	n/a	n/a
Botany	20,000	4,599	424
Entomology	165,332	27,122	2,346
Herpetology	3,254	1,400	330
Ichthyology	5,000	2,421	251
Invertebrate Zoology & Geology	9,158	3,354	89
Ornithology & Mammalogy	2,532	768	853
Totals	205,402	40,743	4,305

Total holdings in all collections: 16,293,852

Garrett, (author of *The Coming Plague*), who gave the Annual Claire Matzger Lilienthal Distinguished Lecture, Donald and Lillian Stokes (*Stokes Field Guide to Birds*), Diane Ackerman (*Deep Play*) and Peter Matthiessen (his most recent book, *Bone by Bone*).

This year the Morrison Planetarium held a particularly stimulating series of Benjamin Dean Lectures. In the fall, four speakers described various aspects of the very early universe, and in the spring we celebrated the tenth anniversary of the series with speakers who are all distinguished astronomers and Fellows of the Academy: Dr. Sandra Faber, Dr. Carl Heiles, Dr. Dale Cruikshank, and Dr. Charles Townes, a Nobel Prize winner for his invention of the maser, a precursor to the laser.

Education is a lifelong process, and long integral to the success of the mission of the education department is the work of the docent program. The docents, the guides who accompany schoolchildren and other groups through the museum's halls, are the live interface between the museum and our visitors. Under the guidance of Senior Science Educator, Dr. Meg Burke, the docent training program has become more formalized, the teaching more comprehensive and concept based.

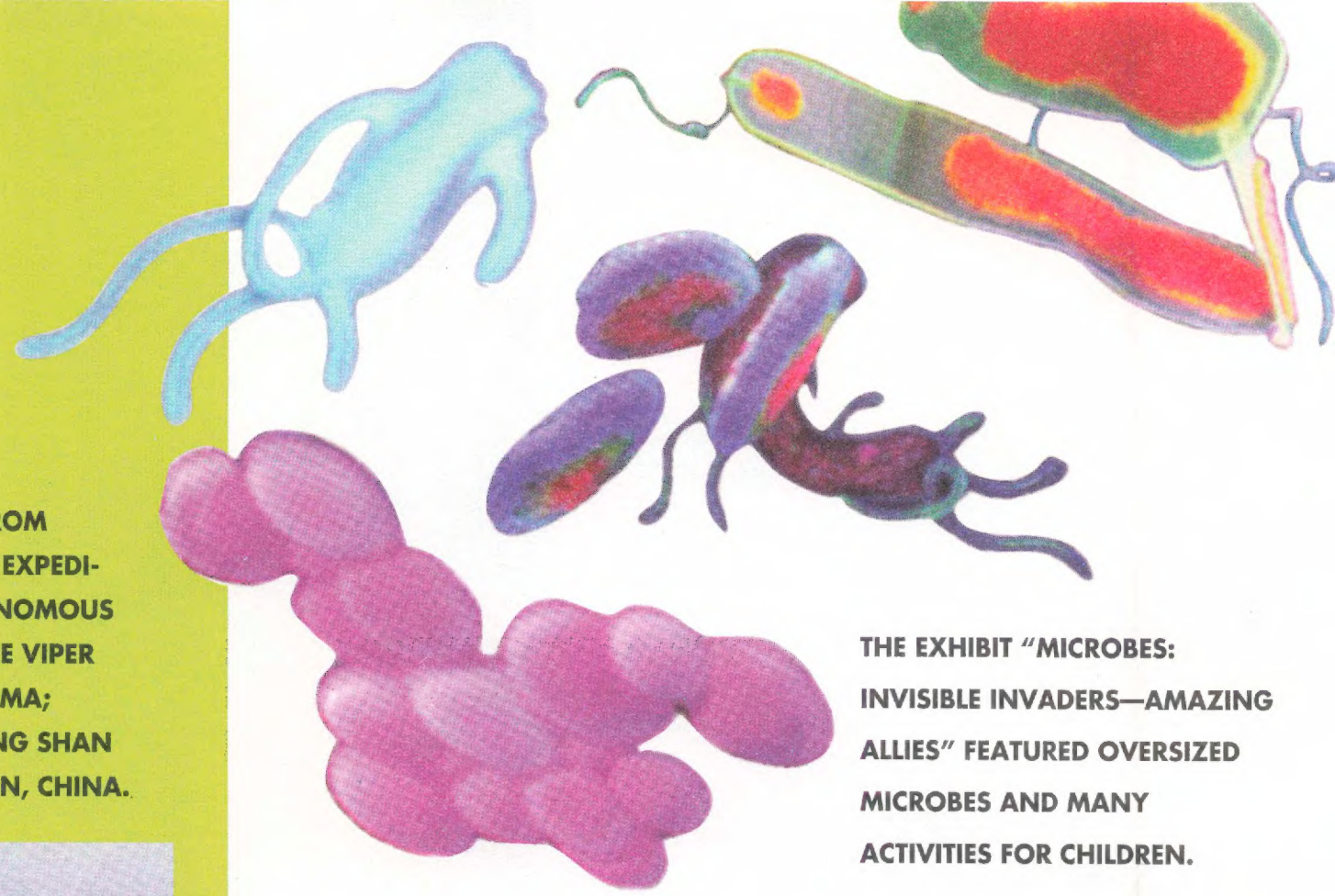
Our educational program is not limited to the United States. The role of Academy scientists is to analyze the critical characteristics of individual plants and animals and determine which are essential for defining a species. Nowhere are these investigations more important than in regions of the less-developed world where population pressures

threaten habitats and species survival. By carefully targeting its resources, the Academy can make a significant contribution to furthering our knowledge of ecosystems and, more importantly, teaching the local scientists collecting and inventory skills. Following the successful expedition to Madagascar last year, the Academy sent a second expedition to Ranomafana National Park, and an initial team of scientists visited Yunnan Province in China.

The second study of Ranomafana, led by Curator of Botany Dr. Frank Almeda, included botanists and entomologists. It took place last October, the austral spring, when many of the flowering plants are in bloom, and the insects that depend upon them are most likely to be in their adult phase and active. The visit included many rewarding discussions with local scientists on the components of diversity and led to closer ties between the Academy and Malagasy research institutes. The expedition to China was to a narrow mountain range in the Dulongjiang region of northwestern Yunnan that has been identified as high in biodiversity and which has only recently been opened to outside research. Led by Senior Collections Manager of Botany Dr. Bruce Bartholomew, the expedition was also multi-disciplinary with Academy scientists from the botany, entomology, and ichthyology departments. It was organized in cooperation with the Kunming Institutes of Botany

ACADEMY SCIENTISTS RESEARCH SPECIES AROUND THE WORLD. FOUR SPECIES ENDEMIC TO MADAGASCAR: SATURNIIDAE MOTH; THE FLOWER OF *SLOANEA RHODANTHA*, ONE OF THE LARGEST TREES IN THE EASTERN RAIN FOREST; A PRINCESS FLOWER, USED BY MALAGASY TO TREAT BOILS; THE BAOBAB, *ADANSONIA RUBROSTIPA*, AN IMPORTANT FOOD RESOURCE FOR LEMURS AND INSECTS.

IMAGES FROM RESEARCH EXPEDITIONS: VENOMOUS GREEN TREE VIPER FROM BURMA; GAOLIGONG SHAN IN YUNNAN, CHINA.



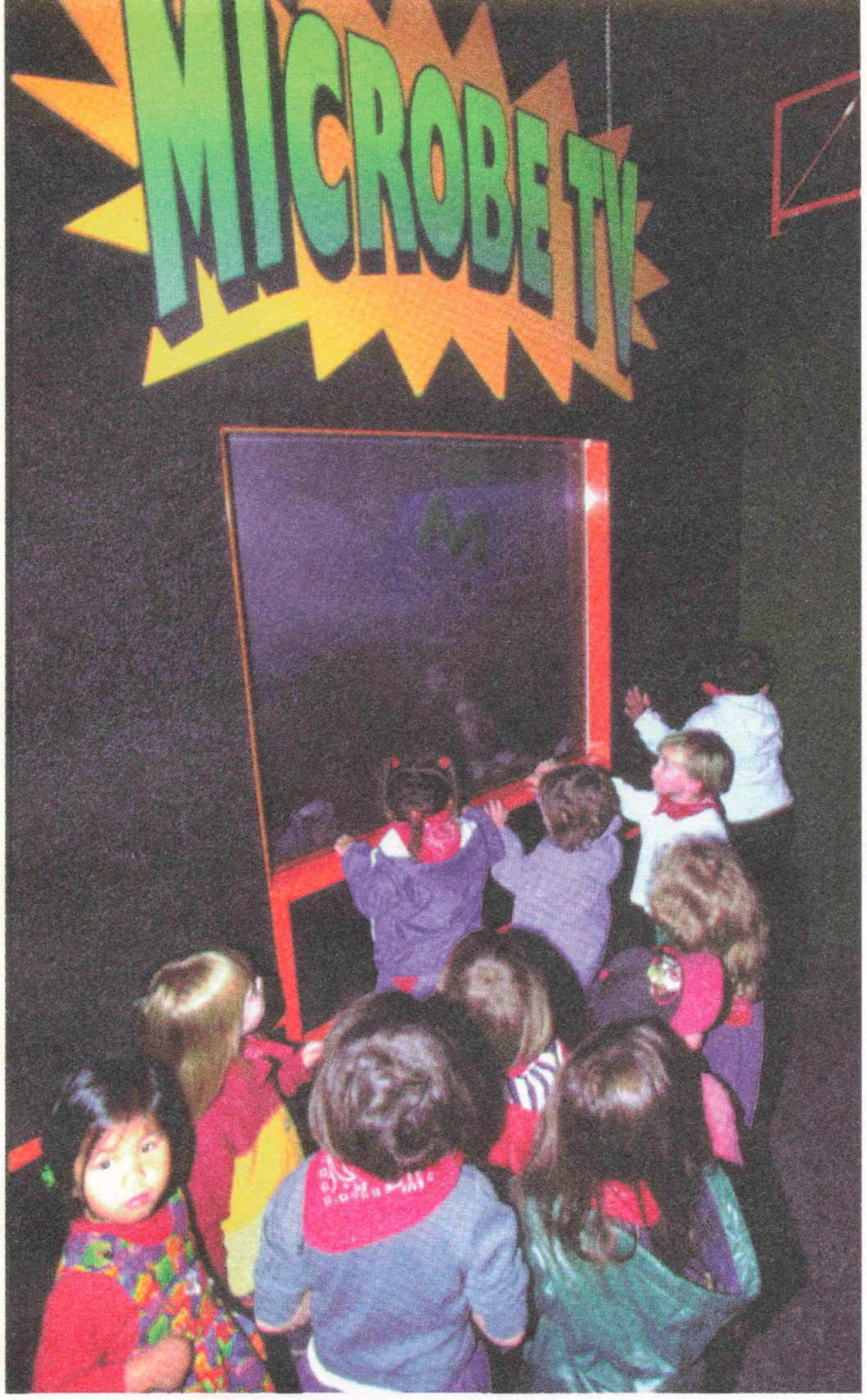
THE EXHIBIT "MICROBES: INVISIBLE INVADERS—AMAZING ALLIES" FEATURED OVERSIZED MICROBES AND MANY ACTIVITIES FOR CHILDREN.

and Zoology. The expedition represents the beginning of the Academy's China Natural History Project, which has been funded in large measure by the San Francisco Bay Area Chinese community, under the guidance of Dr. Tuan Hoang, and by the Yunnan Provisional Commission of Science and Technology.

Under a grant from the National Science Foundation, Dr. Joe Slowinski, Assistant Curator of Herpetology, is helping facilitate a biotic survey and inventory of Myanmar (Burma). The Academy is also acting as a conduit between Burmese and Chinese scientists studying the forest area around their common border, still largely undeveloped and, biologically, unexplored.

Our international outreach also included hosting numerous scientists from Ecuador, the Philippines, Mexico, Taiwan, Japan, Spain, France, England, Wales, Italy, and Australia.

Among other highlights within the Research Division was the establishment of a new Chair—the Lindsay Chair of Botany, named in honor of George Lindsay, who served as the Executive Director of the Academy from 1963 to 1982. Nineteen ninety-eight saw the publication of Dr. William Eschmeyer's "Catalog of Fishes," a mammoth three-volume tome that lists some 50,000 species. The publication was 14 years in the making and earned Dr. Eschmeyer the prestigious Robert F. Gibbs Memorial Award for "An outstanding body of published work in systematic ichthyology." An updated edition of the catalog is available on the Academy's website. Dr. Nina Jablonski



1998-99 AT A GLANCE

Total number of visitors:	882,154
Number of school children attending the Museum free:	190,000
"Free Day" attendance:	116,858

spent five months in Nepal on a Fulbright Fellowship teaching at Tribhuvan University and leading a dig in the Himalayan foothills. She and her team unearthed some 1,500 fossils of mammals and reptiles dating back between three and 13 million years.

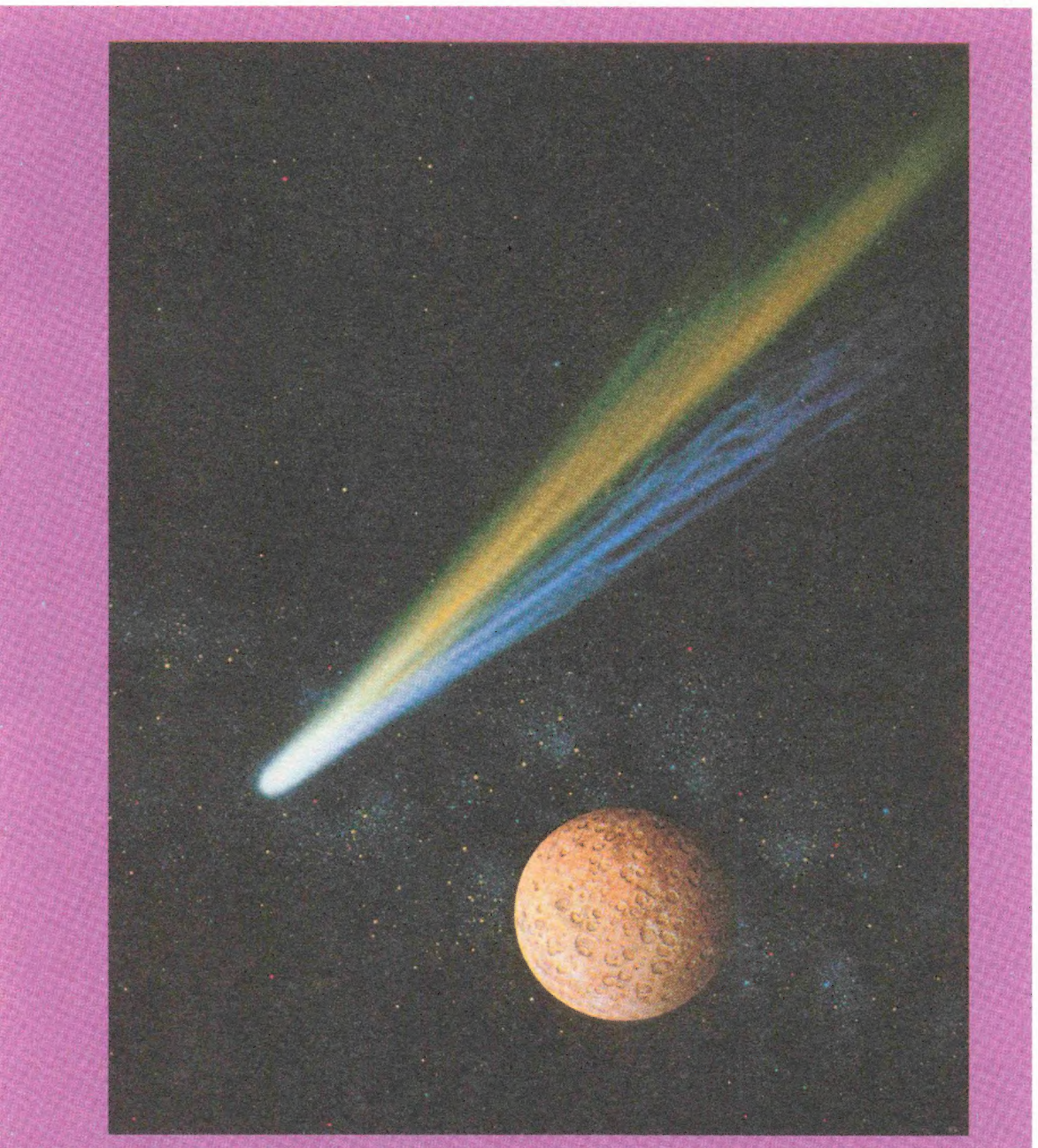
Meanwhile, the ability of the Academy to take advantage of the Internet to disperse information has increased manyfold. For example, the Manzanita Project consists of 7,000 images of California species that have been scanned and made available on-line. The site receives over 2,000 hits a day, 90 percent of them for the plant database.

"I use this site extensively to illustrate a series of plant reports and a plants-blooming identification table. It is a wonderful resource for California plants," explained a teacher in one of many e-mails from our "cybervisitors."

HEADDRESSES (LEFT) AND MASKS (BELOW) FROM THE CEREMONIAL ARTS OF THE AMAZON EXHIBIT.

Inspired by the artifacts of collector Adam Mekler, the Exhibits Department developed an exhibit that dramatically illustrated the vibrant cultures of the Amazon watershed, from the Andean foothills of Peru and Ecuador to the rain forests of Venezuela and Brazil. This is a region where the lives of the people are still inextricably

THE EXHIBIT "MASTERS OF THE NIGHT: THE TRUE STORY OF BATS" INCLUDED A BAT'S EYE VIEW OF THE WORLD.

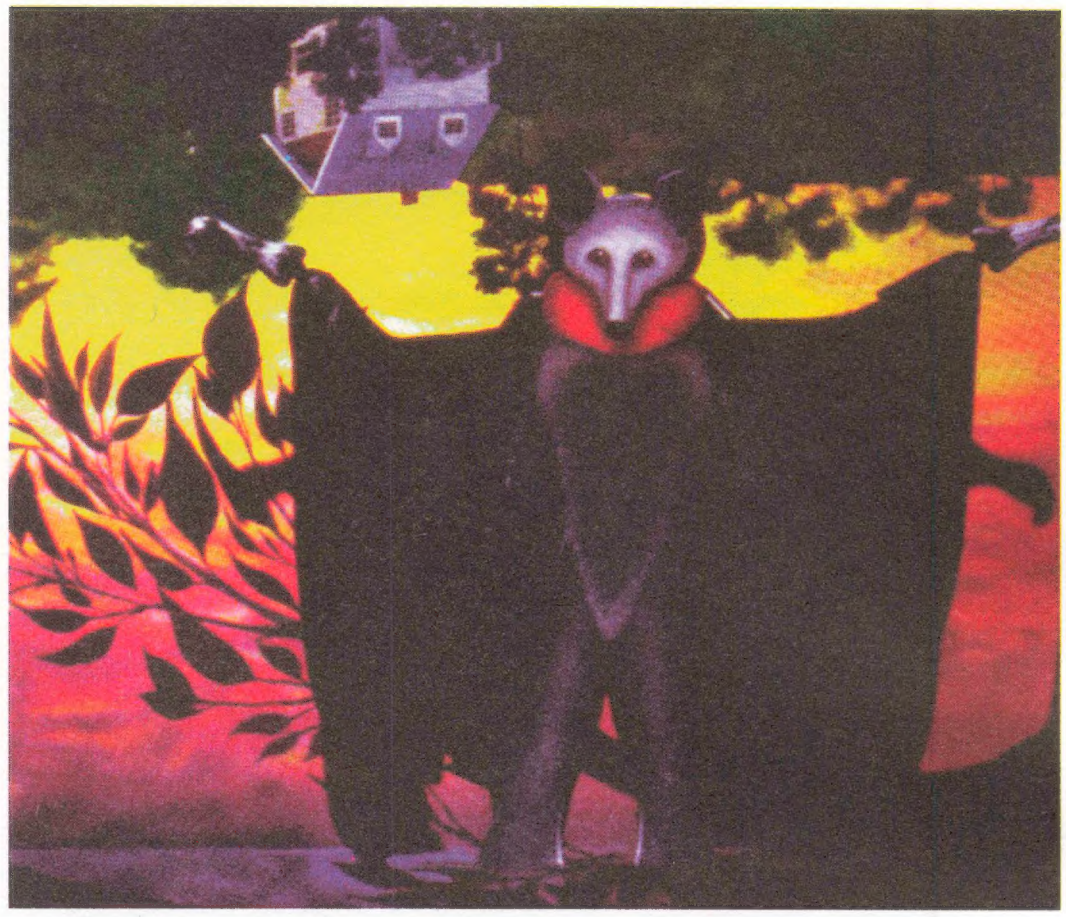


ONE OF A SERIES OF IMAGINATIVE INTERPRETATIONS OF SPACE FROM THE ARTIST'S UNIVERSE.

PLANETARIUM 1998-99 AT A GLANCE

Number of visitors:	100,132
Number of students at school shows:	49,239
Number of Laserium shows:	152
with total audience of:	9,620
Audience for Dean Lecture Series:	2,340

immersed in the natural world around them, a world that is both the subject and the substance of their creations. The exhibit, "Ceremonial Arts of the Amazon," was deftly enhanced by samples from the Academy's scientific collection of colorful plant and animal materials. As part of the Academy's policy of integrating its various divisions, the entire Tropical Room of the Aquarium, 21 tanks, was devoted to small fishes that live in the Amazon Basin. After leaving the Academy, the exhibit has traveled to other museums around the country.



"Microbes: Invisible Invaders—Amazing Allies" was a remarkably accessible presentation that helped people understand the complexity of unseen living forms and their effects, both harmful and beneficial. The displays included a video microscope and many innovative special effects such as 3D animation, a simulated electron microscope, and a lifelike hologram. As with all our exhibits, Microbes was enhanced by facilitators who added depth and understanding to this complicated yet important subject.

Visitors to "Masters of the Night: The True Story of Bats" came away with many of the myths about bats dispelled. It was another highly interactive exhibit providing insights into their echolocation, hibernation, diet, and flight. Bats, we learned, are essential to our survival. Some species eat colossal quantities of otherwise destructive insects, while other species search out nectar and, like many insects, pollinate plants in the process. Interns also added an extra dimension to this popular exhibit. Among their many presentations was one demonstrating the similarity of limbs among mammals: how closely the bones of a bat's wing resemble those of a human arm.

The temporary exhibits were rounded out with two photographic displays. "Pacific Currents," with accompanying text in three languages, portrayed the marine ecology the western United States shares with its two neighbors, Mexico and Canada. "Witness: 100 North American Endangered Species" was redisplayed in a more dynamic setting. A second version of "Witness" is currently touring other venues, as is another Academy-created exhibit, "Dancing to the Fossil Record."

Elkus Exhibit

ARTIFACTS FROM THE NEW PERMANENT EXHIBIT THE ELKUS COLLECTION: CHANGING TRADITIONS IN NATIVE AMERICAN ART. BELOW: BEN ELKUS, WHO CATALOGED THE EXHIBIT WITH PHOTOGRAPHER SUSAN MIDDLETON.

An unusual two-part exhibit in Earth and Space Hall, "The Artist's Universe," featured the imaginative interpretations of artists who have both a scientific understanding of astronomy and an ability to render difficult concepts creatively. The exhibit opened with a series of juried works by members of the International Association of Astronomical Artists (IAAA). The second series was painted exclusively by the Planetarium's resident artist and IAAA member, Lynette Cook.

Sometimes nature lends a hand in our exhibits. The Leonid meteor shower was particularly active last November and, to explain the phenomenon, the Planetarium, revising an old tradition, held evening shows that coincided with the event. These presentations included a showing of the in-house production, "Stardust," which looked at the minor bodies orbiting our star, from particles of dust to rocky asteroids and icy comets. "Stardust" was one of five original public shows written and produced by the Planetarium staff.

Steinhart Aquarium Breeding Programs

SURINAM TOADS BRED AT THE AQUARIUM. THE FEMALE BROODS HER EGGS ON HER BACK. BELOW, THEY HATCH NOSE OR FEET FIRST.

AQUARIUM 1998-1999 AT A GLANCE

Size of collections:	7,000 total specimens, representing 600 species.
Number of research/ breeding projects underway:	6
Number of student visitor/ visiting scientists:	540
Volunteers supporting the work of the department:	70, contributing 4,530 hours.
Seminars, lectures and presentations made:	3

Last May saw us add a new permanent exhibition to the museum floor. San Francisco residents Charles de Young Elkus and his wife, Ruth, spent their lives encouraging and supporting Native Americans, often interceding on behalf of the indigenous people to protect their lands and preserve their culture. The 3,300 documents recording these efforts are now stored in the Academy Library's Special Collections, and a detailed index is available through the Academy's website. The Elkuses also amassed some 1,700 artifacts, primarily the creations of Navajo and Pueblo artists. Although some of these pieces date to the nineteenth century, the majority were made between 1930 and 1960 with the direct support and encouragement of the Elkuses. Through their help, some of the 20th century's most creative artisans achieved worldwide recognition. The collection was donated to the Academy in 1972, and the Elkuses' son, Ben, with assistance from the Anthropology Department, has spent much of the last 20 years cataloguing the pottery, baskets, textiles, kachina dolls, musical instruments, and paintings. These artifacts are now on view in "The Elkus Collection: Changing Traditions in Native American Art." One visit is insufficient to take in the whole of this vast collection. There are so many pieces that every six months some will be replaced in a continually rotating display.

Among our most exciting exhibits are the live aquatic creatures and reptiles on display in the Steinhart Aquarium. Despite its age and the serious wear and tear inflicted by 75 years of corrosive salt water, the Steinhart, the Grand Dame of America's major aquariums, still offers visitors over 600 different species, imaginatively presented. With the final species added, the Live Coral Tank is now host to a fully-developed coral community. Exhilarating confirmation of this came with the successful breeding and raising of the tomato clownfish (*Amphipron frenatus*). The offspring are now doing well in their own tropical display. This successful outcome is due in large part to the deft fingers of Aquatic Biologist William Shepherd who is successfully running a tropical

AQUATIC BIOLOGIST WILLIAM SHEPHERD INSPECTS A NEW GENERATION OF TOMATO CLOWNFISH, ANOTHER OF THE ACADEMY'S SUCCESSFUL BREEDING PROGRAMS.

A RARE BLACKFOOTED PENGUIN CHICK WAS BORN AT THE STEINHART—THE FIRST IN FIVE YEARS.

marine fish captive-breeding program both on the public floor and behind the scenes. This difficult task requires keeping the prospective parents contented, and finding ways to feed larval fish. The giant Pacific seahorse (*Hippocampus ingens*) study reached maturity with four generations of captive-bred seahorses alive at one time, an unprecedented feat. The breeding program expanded to include the longsnout seahorse (*H. reidi*) and the unusual mouth-brooding Banggai cardinal fish (*Pterapogon kauderni*). Three more seahorse species, the Atlantic lined seahorse (*H. erectus*), the tiger-tailed seahorse (*H. comes*), and the common seahorse (*H. kuda*), are all on display.

Exchanges of adult blackfooted penguins (an endangered species) with some 36 other institutions, part of a continent-wide Species Survival Plan, resulted in a chick born at the Steinhart, the first in five years. The breeding program here has been so successful in contributing to the captive gene pool that it is now being held in abeyance while other institutions catch up. With a well-managed, stable captive population in North America's zoos and aquariums, we do not anticipate any need to remove further blackfooted penguins from the wild.

Other breeding programs include the winter-run chinook salmon (operated in conjunction with the University of California at Davis and in its seventh year), two species of endangered desert pupfish, and the intriguing Surinam toads, whose offspring are now spread across zoological institutions in the U.S. and Canada. One of the pupfish species, charco la palma (*Cyprinodon longidorsalis*), a Mexican native that was only discovered earlier this decade, is now extinct in the wild. Its natural spring has dried up. The California desert pupfish (*C. macularius*) is not faring much better in the wild, but both are doing well at the Steinhart. These breeding programs are designed to contribute to the survivability of threatened and endangered species and minimize the impact aquariums have on wild populations.

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Doris Ketcham *LS*
Merlyn Khan *Ed*
Virginia Kibre *Do HL*
Ginny Kirsch *En*
Judy Kjellberg *SE Mm Ed*
Nicole Kleinsinger *Aq CD*
Juliet Knowles *BC Aq*
Patsy Kobe *Bo*
Garrelt Koenig *OM*
James Kohnke *Aq*
Ashish Kolli *EC*
Richard Krause *BC*
Anne Kresko *SE AS*
Adam Krop *TP*
Martha Kropf *Do*
Carole Ladure *Aq*
Rebecca Lafore *He*
David Laity *Do DA ML HL*
David Laity, Jr. *ML DA*
Mary Jane Laity *DA ML*
Aimee Lam *EC*
Jim Lammers *OM*
Christine Landrum *Ex*
Sharon Landwehr *TP SE HL Do CW*
Elizabeth Lane *Bo*
Kathy Lane-Pratt *Do TP HL ML*
Robert Langston *En*
Albert Larcina *Aq*
Kerri Larson *Aq*
On Lee Lau *TP Ed*
Eleanor Lawry *Do*
Betsy Lawson *Os*
Richard Lazarus *ID AE HL Do*
Anita Lee *BC*
C. Bruce Lee *OM*
Jenin Lee *EC BC TP*
Richard Lee *Do HL*
Enid Leff *LS SE OM*
David Legge *DO*
Sally Legge *Do*
Mary Lemos *SE*
Lisa Lenkarski *An*
Curtis Leong *TP*
Ricky Leung *Ed*
Forrest Lewis *BC*
Harrison Li *Ph*
Veronica Li *EC Ph*
Nancy Liebenguth *SE CI*
Ellen Lieber *Do*
John Likas *PW*
Kathleen Lilienthal *Do HL*
Harry Lin *Aq TP*
Ya-Hui Lin *TP*
Sandy Linder *Do*
Aurora Liongson *BC Bo*

Academy Volunteers / Docents

Lois Lippincott *Do Dv*
Jennifer Liscomb *BC*
Carole Litwin *BC*
Christina Lui *SE*
Helen Liu *Ac*
Jessica Liu *BC EC*
Patty Liu *BC*
Miri Locke Dp *BC*
Heather Logan *Aq*
Mae Loh *Ex*
Kathleen Long *Li*
Diana Loomis *BC*
Laura Lorbeer *SE Ed*
Rebecca Louie *TP*
Candace Low *Aq*
Caroline Luce *Aq*
Lawrence Lucks *Do Li SE*
Kiamara Ludwig *Bo*
Vivian Lui *ID*
Elizabeth Lujan *EC*
Marleen Luke *SE*
Judy Lum *JA*
Will Lundy *Aq*
Jimmy Ly *Cl SE*
Anne Lynch *LI*
Matthew Lynch *Ex*
Preston Lytton *PI*
Fontane Ma *En*
Douglass MacMillan *Op*
Anne Macpherson *BC*
Tilly Maddux *Do SE TP*
Ekhard Mahl *Do*
Brent Malarkey *Do*
Michael Maletich *An*
Justin Mallen *Cl Aq*
DeAda Mally *Bo*
Maria Mangold *Do*
Robert Mann *CD*
Patrick Marantal *Ed*
Jo Markovich *SE*
Andy Martin *Aq*
David Martin *DA*
Greg Martin *PD*
Kay Martin *Bo*
Lou Ann Martin *Do*
Steve Martin *BC*
Anna Martinez *Aq IG*
Candida Martinez *EC*
Ted Martinez *IG*
Irma Marx *ML En*
Martha Masterson *SE*
Vivian Matuk *BC*
S. Denise May *BC*

Anne McCamman *BC*
Brian McCarthy *TP*
Elizabeth McCarthy-Flores *CD*
Jean McCauley *Do*
Karin McClune *Do*
Willie McCoy *LS*
Judy McCubbin *Do*
Bruce McDonald *CW*
Mikki McGee *Aq Bo*
Monica McGee PD
Maureen McGowan *Do*
Marcia McLain *He*
Paul McLaughlin *CD*
Raleigh McLemore *OM*
Pamela McNay *Do*
Markus Meier *Aq*
Maureen Meikle *SE AE*
Marko Melendy *IG*
Marck Menke *Bo*
Bill Merkel *Aq*
Joy Mesick *SE*
Marna Mesina *OM*
Shubha Metre *Cl SE*
George Metz *IG*
Louise Meyer *SE ID*
Richard Meyerhoff *Do*
Melissa Michaud *Ed*
Robert Miche *Aq*
Paula Miller *Do HL*
Ralph Miller, III *ML*

ENJOYING THE ACADEMY'S ANNUAL HALLOWEEN PARTY FOR KIDS

R. F. Milne *Do HL*
Bill Mitchell *PW*
Jed Miyashiro *En*
Ryan Miziker *BC*
Robert Mockwitz
Lisa Montano *LS*
Dolores Monye *Cl PI*
Margaret Moody *BC*
Gerald Moore *SE LS Do HL PI*
Katherine Moore *Aq*
Mary Edith Moore *Do SE LS Do HL PI*
Peter Moore *PL*
Virginia Moore *LS*
Austin Morrill *ID AE*
ZeeZee Mott *Do*
Jonathan Muenk *BC*
William Munich *IG*
Carole Murfee *SE ID*
Robert Murfee *SE ID*
Carol Murphy *BC*
Joseph Murphy *Aq*
Peter Myers *LS*
Valerie Myint *JA*
Jennifer Nash *Aq*
Ruth Nash *IG*
Joelene Nation *Do*
Gloria Naval *BC*
Deborah Nebenzahl *IG An*
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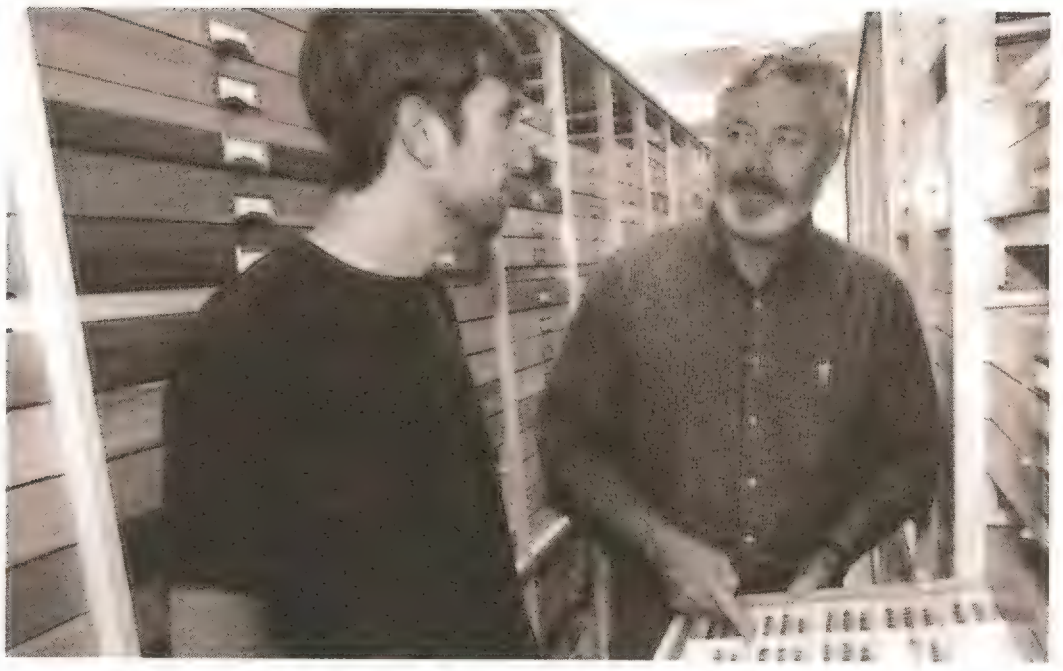
Charles Nemenzo *BC*



INTERN PAUL MAREK WITH CURATOR DR. DAVID KAVANAUGH IN THE ENTOMOLOGY COLLECTION

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Hudelle Newman *Do*
Annie Ng *Do HL*
Joseph Ng *En*
Vicki Ng *IG TP*
Andreas Nguyen *BC*
Donald Nguyen *OM*
Simon Nguyen *TP*
Carland Nicholson *Do*
Sheva Nickravesh *CD*
Therese Nikas *Bo*
Carmela Nilan *ID SE*
Molly Nilsson *En*
David Nonomura *Aq*
Burt Norall *TP*
Marion Norberg *Do*
John Northwood *Do*
Aksone Nouvong *Aq*
Cindy Novak *BC*
Sean Nunan *Li*
Sunthron Nuntadusit *Ed PI*
Michael Nutile *IG*
Patricia O'Brien *HL SE Do*
Lindsay O'Hara *Ex*
Patty O'Hara *Ec*
Damon O'Keefe *Ed*
Walter Obermeyer *Do HL*
Juan Ochoa *BC Bo*
Miki Ohara *Ed*
Ken Okutake *CD Aq*
Benjin Olshin *IG*
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Georgina Ortiz *Aq*
Collins Orton *AE*
Dorothy Oster *Do*
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Ed Ow *DA*
Benjin Owen *Aq*
Diane Owens *BC*
Alan Pabst *Do*
Kathleen Pabst *HL ML Do*
Mark Pabst *IG*
Leonard Page *BC*
Mary Pagonas *HL Do*

Sunny Pak *Bo*
Heidi Palacios *Cl Do SE*
Paul Palestine *Op*
Apple Pallarca *EC*
Ming Pan *BC*
Elizabeth Pannell *Aq*
Florence Pardini *HL Do*
Branden Park *Aq*
Jim Parkinson *Do HL*
Luba Parry *AE*
Dave Parsons *Aq*
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Nestor Pascual *ID*
Antonio Paulino *HL Do*
Monica Payne *Aq*
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Michel Perekrestenko *IG*
Annette Perry *Do*
Rebecca Peters *Bo*
Dawn Peterson *IG*
Angela Petitt *TP Aq*
Chris Petromilli *Aq*
Linda Pettigrew *Aq*
Nam Phan *CD*
Shawn Phillips *BC*
Nancy Pickford *Do*
Guy Pilara *IS*
Jennifer Pipp *Aq*
Sanford Plainfield *HL Do*
Betty Pollock *Ed Do HL ML*
Yelena Polovinchik *Os*
Joan Pont *HL Do*
Margaret Poole *Do SE HL*
Susan Poole *SE Do HL*
Barbara Pope *IG Ic*
Michael W. Pope *Ic*
Brad Post *Aq*
Jenny Pramuk *Aq*
Ann Preece *Do LS*
Ellen Price *Do*
Dolores Priem *BC*
Judy Prokupek *Do*
Robin Prothro *Bo*
Mark Puchir *TP*

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Jennifer Quan *Ed*
Kendall Quinn *En*
Christopher Quock *Aq*
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Megan Rathfon *OM*
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Kenneth Reed *TP BC*
Kathy Reichardt *Do*
Anita Reichel *ID*
Cecil Reichert *LS*
Louise Reiter Hl *TP SE Do*
Mary Renaker *SE Do Li SC*
Erin Rentz *LS*
Betty Reuter *Ed VS*
Valarie Revels *Li*
Jernajeoal Reyes *BC*
Andrew Reynolds *BC*
Hugh Reynolds *Do SE ML*
Julian Rhine *Do*
Jean Ribardo *En*
Alexandrine Rich *Bo*
Dana Rich *BC*
Diane Richards *CD BC*
Elizabeth Rieger *Do*
Nancy Riley *Do*
Gino Rinaldi *CD*
Glen Risdon *Li*
Ruby Risser *Do*
Janet Robbins *Do*
Jay Roberson *PI*
Rose Roberto *HL Do*
Mary Roberts *HL Do*
Michael Roberts *CW*
John Rocco *Aq*
Hase Rodenbaugh *CD Do BC*
Helen Rodgers *Do HL SE*
Manuel Rodriguez *CD*
Stanley Rodriguez *SE Cl*
Barbara Rogers *Do*

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Seth Rosenthal *BC*
Tinka Ross *PL*
Sissy Rossi *HL Do*
Bill Roten *BC*
Lois Roth *Do*
Daniele Rubcic *Aq*
Elizabeth Ruck *IG*
Rebecca Ruiz *PI*
Dorothy Rumney *Do*
Thea Ruzette *CI*
Barbara Sabath *Aq*
David Salgado *Ex*
Talia Salter *Aq*
Sergei Samborski *BC*
Grace Samson *Li*
Ivan Samuels *OM*
Doris Sanchez *ID*
Diane Sands *En*
Alexandra Sangmeister *OM*
Raymond Sante *Aq*
Ben Saturen *LS*
Victoria Saxe *En*
Maria Schaefer *IG*
Alex Schafgans *TP*
Marjorie Schmelzer *IG*
Herbert Schmidt *Do*
LaVerne Schmidt *Do*
Morgan Schmidt *Ex*
Peter Schmidt *Do*
Harold Schneringer *PI*
Julia Schoellenbach *DA*
Jacqueline Schonewald *OM*
Christine Schooley *SE An*
Elizabeth Schultz *Do*
Wende Schwake *Aq*
Norman (Jerry) Scott *Do*
Ruth Scott *Do*
Sara Seaton *Ed*
Frankie Seffens *Do*
Lesley Segedy *Do*
Joan Serra *Do ID*
Jennifer Setten *Ed*
Theresa Sevieri *Li*
Ashish Shah *BC*
Penelope Shaner *LS*
Albert Shell *Do*
Fred Shelton *LS OM*
Peter Shepard *Ed*
William Shepherd III *Aq*
Jessica Sheppard *OM*
Walt Shepps *Li*
Anthony Shew *BC*

Naomi Shibata *PW*
Jeanette Shinsako *Bo*
Mary Shirley *Aq*
Jack Shnider *Do HL*
Michelle Shouse *IG*
Rodney Shu *CI*
Hanna Silver *BC*
Marjorie Silver *Do*
Arthur Simpson *BC*
Ron Simpson *Bo*
Beth Singleton *AS Dv*
David Siu *Li BC*
Clyde Smith *Do*
Jeffery Smith *En*
Sue Smith *Bo*
Hector Socarras *SE*
Katrina Socco *En*
Jody Soldevila *SE*
Debbie Soler *BC*
Maria Solis *Do*
Kristen Sorensen *Aq*
Eriza Sorenson *BC*
Sarah Soule *EC*
Jill Spangenberg *Aq*
Connie Spanier *SE Do HL*
Patricia Sparling *Aq*
Carol Spinali *Do*
Sherry Spitzer *BC*
Anita Spivack *Do*
Dimitri Spodine *Aq*
Danette St.Onge *Ex*
Maggie Stack *Aq*
Cecine Stadden *Bo*
Brandon Staglin *ID ML*
Barbara Stanton *Do*
Cathleen Stark *Li*
Tracy Starke *SE CI*
Nancy Stearns *DA BC*
Erin Steele *DA*
Ted Steffens *AE*
Judy Stemen *Ex*
Max Stepanian *Aq*
Tanya Stepanian *Do*
Crystal Stern *IG*
Edgar Stone *Do*
Eric Strand *Aq*
Nadia Strasser *OM*
Carol Straus *OM*
Mila Stroganoff *HL Do*
Kevin Sturm *Aq*
Amelia Sugarman *Do*
Shawn Sutherland *Aq*
Marc Swanson *Aq*

Joshua Swartz *CD*
Nicole Swartz *An*
Paul Swiatko *CD*
Alan Swithenbank *BC*
Isidore Szczepaniak *OM*
Edith Tabak *BC*
Nellie Taha *SE*
Evangeline Tai *Ex*
Gene Takagi *BC*
Chikara Takahashi *BC*
Marilena Tamburello *Ex*
Sabrina Tan *EC*
Mary Tarlecki *Aq*
Andrew Templeman *BC*
Kristen Thomas *An*
Margot Timberlake *Do HL*
Heather Tine *BC LS*
Fong-Yi Ting *Li*
Edith Tirado *CI EC*
Martin Tom *Do*
Fujita Tomotake *Ex*
Alice Tong *Do*
Cindy Tong *TP*
David Toren *Bo*
Louise Torraco *Do SE HL*
Nicole Torres *CD*
Eric Tosaris *Do*
Sharon Toy-Choutka *BC OM*
Electra Bambi Truong *EC*
Leilon Tsue *Ph*
Jennifer Tucker *Aq CI*
Patricia Tucker *Do*
Jonathan Tupy *En*
Joyce Turowski *OM*
Carol-Ann Uetake-Shapiro *BC*
William Urbani *HL Do*
Veronica Uy *CS*

Luke Vairo *Aq*
Pam Van der Leeden *OM*
Jim Vann *PW*
Queta Vargas *SE Mk CI*
Gloria Vasquez *Ed*
Robert Venegas IS
Patricia Venturino *ID*
Joan Verdi *Do*
Eleanor Visser *Do Os Ed*
Nataliya Volsrava *Bo*
Frank Vuong *Op*
Kate Waffner *CW*
Aaron Walburg *CS*
Johnny Walker *Aq*
Thomas Walker III *ML EC*
Kim Wallace *Bo*
Janet Walsh *LS*
Sindy Wan *DA*
Jeff Warren *Ex Aq*
Delcey Watkins *Do HL*
Errol Watson *Aq BC*
Kathleen Watson *Aq CI*
Jeremie Wattellier *Ed PI*
Barbara Webber *SE HL Do*
Merna Wechsler *SE*
Kimberley Wegesin *Do*
Xuan (Ray) Wei *BC*
Daniel Watson Weller *IG*
Penny Wells *Do*
Terri Werner *IG*
Ann Weybright *SE ID*
Walter Weybright *SE ID*
Sonya White *OM*
Alfred Wilcox *Do*
George Wilhelmsen *BC*
Shelly Willard *BC*
Seaberry Williams *IG*

Marcella Williamson *Do HL*
Wilfred Willis *PW*
Dan Wilson *BC*
Douglas Wilson *HL Do*
Anna Wojdyla *SE*
Angela Won *BC EC*
Anjennette Wong *BC*
Diane Wong *En*
Eva Wong *BC*
Jacky Wong *TP*
Kimberly Wong *He*
Lillian Wong *Do HL*
Ophelia Wong *Do*
Sherrie Wren *Bo*
Jonathan Xiong *SE Ed Mm*
Eric Yan *Ed*
May Yee *Dv*
Earl Yorkey *CD*
Andy Young *ID*
Michael Young *Li SE*
Nyda Young *Bo*
Tomme Young *BC*
Gloria Yu *CS EC*
Rosemary Saulino Yu *BC*
Anthony Yuen *DA BC*
Flora Zagorites *SE ID*
Jerry Zagorites *Ex SE*
Steven Zarit *Aq CD*
Cay Zilka *Do*

ASSIGNMENT

AC Accounting
AE Academy Escort
An Anthropology
Aq Aquarium
AS Academy Store
BC Biodiversity Center
Bo Botany
Bt Bats
CD Certified Diver
CH Cowell Hall Hands-on
CI Clerical
CS Computer Services
CW California Wild
DA Dinosaur Adventure
Do Docent
DR Discovery Room
Dv Development
EC Early Childhood
Ed Education
En Entomology
Ex Exhibits
He Herpetology
HL Highlight Docent
Ic Ichthyology
ID Information Desk
IG Invertebrates & Geology
IS Instrument Shop
JA Junior Academy
Li Library
LS Library Special Collec.
Mi Microbes
Mk Marketing
ML Missing Links
Mm Membership
OM Ornithology & Mammalogy
Op Operations
Os Osher Laboratory
Ph Photography
PI Public Information
PL Planetarium
PP Public Progrs
PW Pepperwood Ranch
ScP Scientific Publications
SE Special Events
SH Seahorse Project
TP Tidepool
VS Volunteer Services

Scientific Publications

RESEARCH DIVISION

ANTHROPOLOGY

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Scientific Publications:

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[Review of] *Prentice Hall Biology: The Living Science.* A high-school textbook. *The Textbook Letter* 9(4):6-7.

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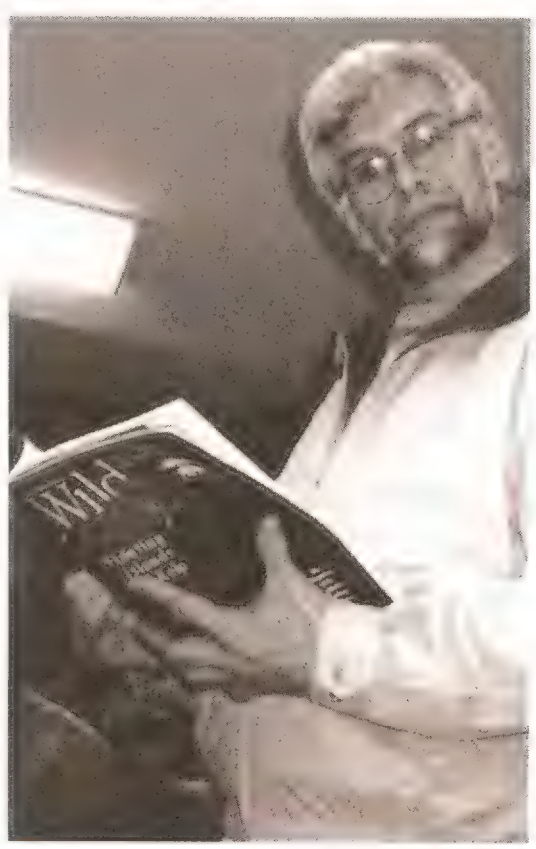

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Night Foreman
Gerald Barlow

Auto Service

Auto Service Technician
Jeff Camargo

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Susan Cratty
Shift Supervisor
Lulu Mason
Cashier/Facilitator
Elvis Aguilar
Roberto Anstirman
Francisco Aquino
Tanya Arreguin
Roman Baldwin
Robert Bullard
Bonnie Chiang
Nancy Cowhig
Leonila David
Jennifer Delury
Marilyn Dempster
Jenifer DeSofy
Minerva Espiritu
Christa Figone
Tamura Holyfield
Alex Ilnicki
Fran Keane
Heather Kuo
Deanna Lane
Rudy Lara
Keith Lindquist
Gloria Manabat
Jannice McDonald
Epifanio Mendoza
Janna Perdue
Tessie Poirier
Mike Sevik
Chloe Shelby
Amber Smith
Gerry Smith
Jennifer Villamin
Sheila Waterkamp

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Supervisor
Levelle Alderson
Shift Supervisor
Aleta Blakely
Ana Membreno
Jerry Robinson
Hourly Shift Supervisor
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William Exeline
Steve Galliher
Paul Little
Rafael Lopez
Edward Orey
Rebecca Rozewicz
Paul Woolf
Hourly Guard
Hany Abdoun
Mansour Alowdi
Mofeed Al-Siday
Johnny Batista
Cybele Berges
Ryan Bernard
Damien Cole
Ed Figueroa
Momodu Fullah
Mario Gonzales
Mohammad Kanna
Hugh Kwok
Elias Lebbos
Tommy Meisel
Lenny Melendrez
Gregory Moore
Henry Ortiz
Juan Padilla
Dora Sosa
Deneshia Taylor
DeForrest Thompson
Larry Toji
Roland Villanueva
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Leora Anderson

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Shirley D. Davis
Accountant
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Jack K. Wong
Bookkeeper
Alice Chu
Roza Polovinchik
Accounting Clerk
Caroline Balsley

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Freda H. Sherman

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Human Resources Associate
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Senior Secretary
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Klugh Jordan
Stewardship Officer
Jennifer Malouf
Senior Development Researcher
Alexandra Hamilton
Grants Officer/Corporations and Foundations
Christiaan Kleiger
Administrative Assistant
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Stephanie Gantt (from 4/99)
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Jessica Hutchinson
Planned Giving Consultant
Carol Pollock
Planned Giving Officer
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Patricia Fisher
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Aaron Gunderson
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Jamie Bostick
Sales Clerk
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Dirk Hoekstra
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Exhibit Developer
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Exhibit Designer
Marco Centin
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Exhibit Graphic Designer
Rebecca Wells
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Dong Lin

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Assistant Superintendent/ General Curator
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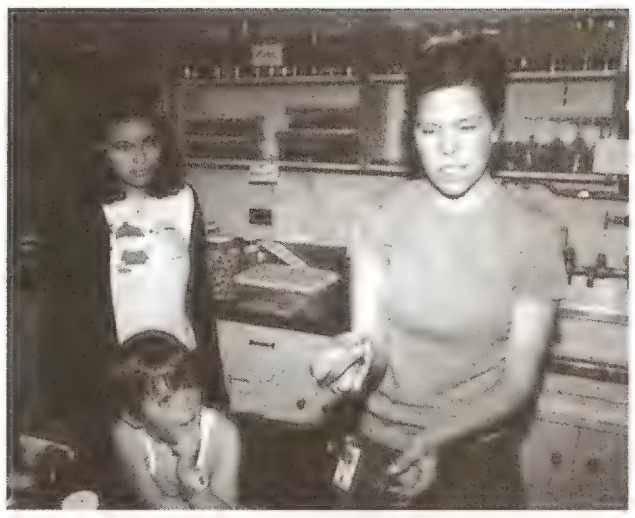
Kenneth Howell
William Rohrs
Aquatic Biologist II
Mike Boyle
Jorge Gomezjurado
Lloyd F. Gomez (to 6/98)
Carey Linder
Peter Miller
William Shepherd



HERPETOLOGIST LINDSAY HENWOOD WITH RAPT AUDIENCE

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Helen Tozer
Salmon Biologist
David White
Gordon Holtgrieve (to 11/98)
Salmon Project
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Arden Yingling

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Schlinger Curator
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Curatorial Assistant
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Research Assistant/Secretary
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Daniel M. Cohen
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Field Associate
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Senior Curator
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Hanna Chair and Executive Director
J. Patrick Kociolek

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Adjunct Curator
Louie Marincovich
Senior Research Fellow
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Postdoctoral Fellow
Angel Valdés
Research Scientist
Elisabeth Fourtanier
Sarah Spaulding
Senior Collections Manager
Jean F. DeMouthe
Robert J. Van Syoc
Senior Curatorial Assistant
Elizabeth Kools
Curatorial Assistant
Annette Fortin
Christopher Mah
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Secretary
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William J. Light
William R. Liltved
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Albert Mahood
Michael A. Murphy
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Peter U. Rodda
Mary K. Wicksten
Field Associate
David R. Beeson
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Frank Perry
William D. Pitt
Clarence Schuchman
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Laboratory for Scanning Electron Microscopy
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Library
Academy Librarian
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Assistant Coordinator
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Academy Archivist
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Oral Historian
Nyri Scanlon
Research Associate
Lu Eldredge
Sam Wilson

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Postdoctoral Research Associate
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Senior Curatorial Assistant
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Andrea Jesse
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Michael W. Newcomer
S. Jonathan Stern
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Marc A. Webber

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Senior Resarch Fellow
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Associate
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Youth Programs Assistant
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Beth Mason
Adult and Family Education Assistant
Margo Yetemwork
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Careers in Science Manager
Kellyx Nelson
Intern Program Assistant
Don Garcia
Field Studies Manager
Jack Laws
Associate Environmental Educator
Zakary Zide
Shoreline Program Coordinator
Vicki Breazeale (to 1/99)

Volunteer Services
Volunteer Services Chair
Diane Butler
Volunteer Coordinator
Rosalind Henning
Docent Coordinator
Kathleen Lilienthal

Balance Sheet

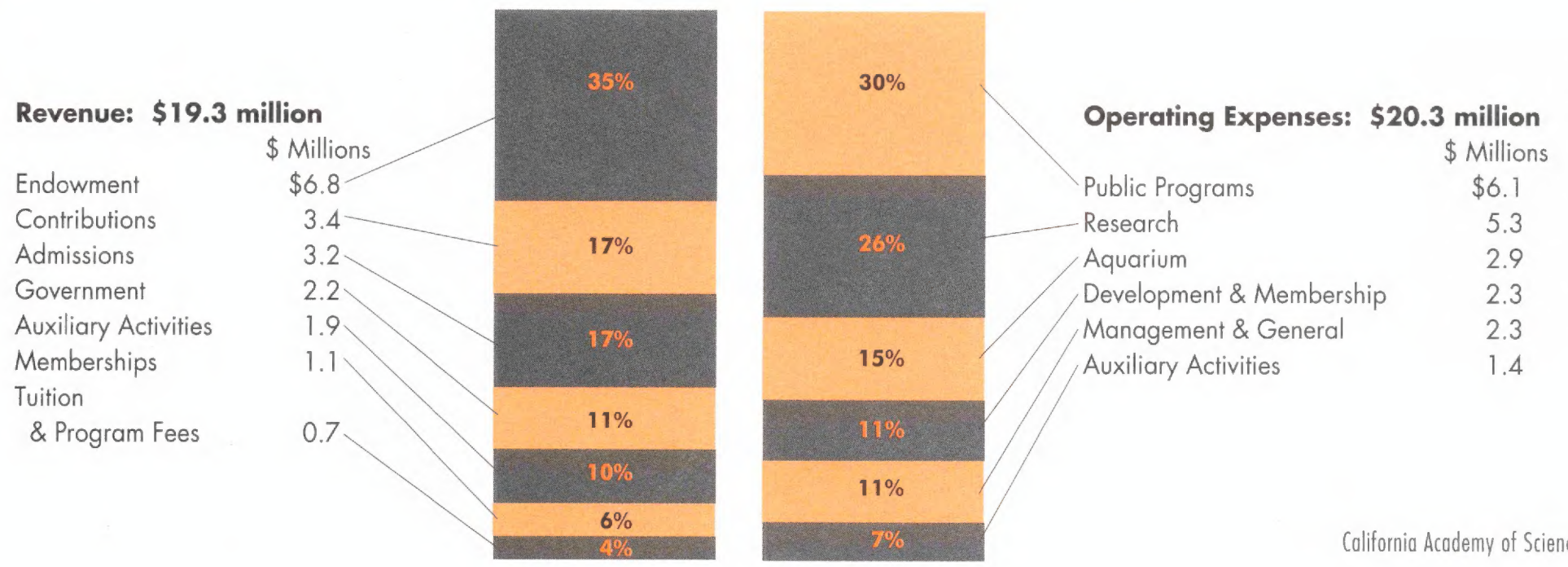
June 30, 1999 with comparative totals for June 30, 1998

Assets	Operating	Plant	Endowment	1999	1998
Cash & Equivalents	$ 633,540	14,872		648,412	1,356,348
Investments in Marketable Securities	2,560,369	12,128,495	131,699,190	146,388,054	129,883,594
Receivables:					
Research Grants	211,881			211,881	38,199
Interest & Dividends	324,518	184,091		508,609	498,105
Other	182,472	145,176		327,648	181,568
Contributions	1,230,855			1,230,855	1,399,958
Due (to) from other funds		(424,747)	(162,608)	587,355	
Inventory	421,109			421,109	467,692
Prepaid Expenses	278,767			278,767	331,209
Investments Held in Trust			3,948,528	3,948,528	3,847,695
Property & Equipment at cost, less Accumulated Depreciation		35,408,145		35,408,145	35,659,529
Total Assets	$ 5,418,764	47,718,171	136,235,073	189,372,008	173,663,897
Liabilities & Net Assets					
Accrued Expenses & Other Liabilities	$ 1,449,960	71,134	72,970	1,594,064	1,747,436
Deferred Income	142,546			142,546	135,912
Annuities Payable			1,830,117	1,830,117	1,653,127
Total Liabilities	$ 1,592,506	71,134	1,903,087	3,566,727	3,536,475
Unrestricted Net Assets					
Available for Operations	1,327,438		7,001,000	8,328,438	9,510,869
Designated for Long-Term		35,408,145		35,408,145	35,659,529
Designated for Endowment			106,362,674	106,362,674	93,803,895
Total Unrestricted	1,327,438	35,408,145	113,363,674	150,099,257	138,974,293
Temporarily Restricted Net Assets	2,498,820	12,238,892	1,585,993	16,323,705	16,492,743
Permanently Restricted Net Assets			19,382,319	19,382,319	14,660,386
Total Net Assets	$ 3,826,258	47,647,037	134,331,986	185,805,281	170,127,422
Total Liabilities & Net Assets	$ 5,418,764	47,718,171	136,235,073	189,372,008	173,663,897

Statement of Activities

Years ended June 30, 1999 and 1998

Changes in Net Assets	Operating	Plant	Endowment	1999	1998
Revenue & Gains					
Admissions	$ 3,184,547			3,184,547	3,440,414
Contributions	3,382,205	262,953	5,615,884	9,261,042	13,697,675
Memberships	1,073,425			1,073,425	1,135,104
Tuition & Program Fees	738,173			738,173	867,654
Auxiliary Activities	1,908,340			1,908,340	2,062,709
Government Grant Income	547,016	140,752		687,768	276,425
City & County of San Francisco	1,696,943			1,696,943	1,691,304
Investment Income	4,340,223	757,748		5,097,971	4,704,089
Net Realized and Unrealized Gains on Long-Term Investments	2,420,530	(372,237)	12,083,753	14,132,046	20,154,718
Total Revenue & Gain	$ 19,291,402	789,216	17,699,637	37,780,255	48,030,092
Expenses					
Research	5,245,921	533,937		5,779,858	5,383,554
Public Programs	6,088,967	558,346		6,647,313	6,015,472
Aquarium	2,866,128	309,684		3,175,812	3,232,813
Development & Membership	2,328,157	330,654		2,658,811	2,503,246
Auxiliary Activities	1,431,026	59,496		1,490,522	1,570,254
Management & General	2,298,212	51,868		2,350,080	2,273,789
Total Expense	$ 20,258,411	1,843,985	0	22,102,396	20,979,128
Transfers Between Funds					
Capital Expenditures	(658,729)	658,729			
Other Transfers	4,000	(4,000)			
Increase/(Decrease) in Net Assets	(1,621,738)	(400,040)	17,699,637	15,677,859	27,050,964
Net Assets					
Beginning of Year	5,447,996	48,047,077	116,632,349	170,127,422	143,076,458
End of Year	3,826,258	47,647,037	134,331,986	185,805,281	170,127,422



Credits

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Research: **Michele Wellck**

Art Direction & Graphic Design: **Susan Schneider**

Production Assistance: **Linda Corwin**

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